Learning Technologies Project Bulletin

Brought to you by NASA, TRW, & West Virginia University

News Bytes

NASA Quest's LTC Distributing Programs via RealMedia Servers

Kate Weisberg
kweisberg@mail.arc.nasa.gov

NASA Quest's LTC has been distributing three major programming series via Live-On-The-Net's network of RealMedia servers. The 1999-2000 series events (*All About the Sun*, a cooperative program with Stanford SOLAR Center; *Countdown, Landing to Launch*, a Space Team Online and Kennedy Space Center effort; and *NASA Connect,* from Langley Research Center [LaRC]) have all been big hits. The first introduction of the series events brought an estimated 25,000 hits to each of the pages and as many as 2,000 streams per program.

LDAPS Activities around Nation

Ben Erwin
berwin@tufts.edu

Elementary school parents of LDAPS teachers in Lincoln, MA, got a taste of what it's like to design and program with LEGO at a hands-on parent night session. Parents designed a Mars colony that could sustain human life and that their kids will finish as a part of their curriculum.

The LDAPS site is being transported from West Virginia to NASA Ames in California, where it will join other robotics Web sites such as **http://robotics.arc.nasa.gov**.

At an event called Mindfest at the MIT Media Lab, LEGO software and curriculum ideas developed by LDAPS members were on display and a part of panel discussions at **http://www.tufts.edu/~berwin/mindfest/**. LDAPS members are also coaching two teams in the FIRST LEGO league this season. The teams will be at the Museum of Science on December 4 for the state tournament!

The LDAPS curriculum is in the process of becoming a part of the curriculum of the Boston Public School System and many other schools across the country.

Aviation Academy 2000 Alive and Well

Tom D. Schieffer
tschieff@mecca.org

Aviation Academy 2000 grantees are alive and doing fine. The high school classes are flying twice a year and Wooddale will start its second Aviation Ground School in January 2000.

We are assisting Women In Aviation, International with their national conference, which will be held in Memphis from March 9 - 11, 2000. The Wooddale Aviation Advisory Group will make a presentation to the assembly and the visiting educators will be given a tour of the NASA-Wooddale Aviation and Travel Program at the campus.

Nothin' but Net

Search Engines: How to Know Which to Use

Rudy Hoffert
rhoffert@rspac.ivv.nasa.gov

Yahoo, Alta Vista, Dogpile, NorthernLight, WebCrawler…which one do you use? There are so many different search engines on the World Wide Web that choosing one can almost be impossible. If you

know exactly what you're looking for, just about any search engine will do. Say you're looking for NASA Web sites but you don't know any URLs. Go to any search engine (like Yahoo) and type what you're looking for in quotes ("NASA"). This will give you a place to start looking. A lot of simple searches can be done in this fashion, but some things are a little harder to find.

Putting what you're looking for in quotes tells the search engine to search for that exact string of words. If you're looking for multiple things, just putting your search in quotes won't always work. Breaking the words up can help. Put each part of the search into quotes and use AND between

the parts. This allows the search engine to search for all parts and will only return links that include all parts of your search. You can also use OR in your search statements. Using OR instead of AND in your search will give you results that include either part of the requested query.

The question still lingers about which search engine to use. One of the most useful search engines is Dogpile.com. Dogpile searches several search engines for you, and it's really helpful to know that all the information you are looking for isn't only on one domain. If you search with Yahoo.com you may miss information on About.com and

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vice-versa. Dogpile searches twelve different search engines, giving you a better chance of finding what you want.

Sometimes Dogpile can give overwhelming results. You may need some information for a research paper and with Dogpile the query results can be too much to look through to find what you need. You might end up asking yourself, "Where do I start?" This can be a bad thing. One of the newer search engines on the Web is Northernlight.com. It searches the Web and categorizes the results. This can make finding the information for your research paper much easier.

Most search engines work the same way, so choosing one can be difficult. The best advice I can give is to just try them all and when you find one you like, stick to it. When a new search engine surfaces, don't forget to try it too. Here are some search engines to try now. Happy surfing!

www.looksmart.com
www.goto.com
www.directhit.com
www.about.com
www.centraal.com
infoseek.go.com

www.lycos.com
www.altavista.com
www.yahoo.com
www.whatuseek.com
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www.excite.com
www.webcrawler.com

If you would like to be on the LTP Bulletin mailing list, please send e-mail to John S. Trent III at: jtrent@rspac.ivv.nasa.gov, or write to: TRW/RSPAC, 100 University Drive, Fairmont, WV 26554. Phone: (304) 367-8347, fax: (304) 367-8377.

News from NASA

NASA to Grant $480,000 to Inspire High School Youth

John Bluck
Jbluck@mail.arc.nasa.gov

NASA is providing $480,000 in grants to 80 high schools across the nation in a unique robotics program to inspire students to follow careers in science and technology.

The challenge for students from each of the approximately 300 competing schools is to design a robot to accomplish a series of tasks quickly and efficiently. The robots are then allowed to compete in an arena setting to determine a winner.

"During the next few decades NASA will be launching a fleet of automated robots to explore the solar system. We want to empower the next generation of students to be the designers of these intelligent machines," said Mark León of NASA's Ames Research Center at Moffett Field, CA.

NASA engineers will evaluate the applications and winners will be notified by e-mail no later than December 3, according to organizers. Half of the schools to be awarded $6,000 will be "disadvantaged," as defined by the US Department of Education. Each winning school will receive a $5,000 credit toward registration fees. The grant will also provide about $1,000 to each winning school for lodging and travel to the national

robotics games "kickoff" ceremony to be held January 8, 2000, in Manchester, NH.

The grant money will be paid to the non-profit organization For Inspiration and Recognition of Science and Technology (FIRST) of Manchester, NH. It will provide a basic robot parts kit, a remote control, and other necessary items to each grantee. FIRST will also arrange travel to the kickoff ceremony for one representative from each of the 80 grant-winning schools. In all, more than 300 schools will participate in the games. FIRST's Web site is at **http://www.usfirst.org/**.

Detailed requirements of the robotic games will be carefully guarded until they are announced at the kickoff ceremony. Following the ceremony, students and their advisors will design and construct remote control robots in six weeks using identical kits of materials. Advisors are often professional engineers from private industry, government, and universities.

NASA is awarding a total of 80 grants to the schools, with 20 grants in four of FIRST's ten regions. The four NASA regions include the NASA Langley/Virginia Commonwealth University (VCU) region, the Southeast region, the Lone Star region, and the NASA Ames region.

In the NASA Ames region, student-made robots will "clash" in competitions to be held March 30 - April 1, 2000, at the San Jose State University Event Center in San Jose, CA. This region includes Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, Oregon, Utah, Washington, and Wyoming.

The NASA-sponsored Southeast regional games will take place at the Kennedy

Highlights & Happenings

"From a Distance" Named Semifinalist for GII Award

Ken Christian
Kenneth.Christian@ssc.nasa.gov

John C. Stennis Space Center's (SSC) "From a Distance" Web site was recently recognized as a leader in the digital revolution when SSC Education & University Affairs was named as a semifinalist for a Global Information Infrastructure (GII) award. Semifinalists are recognized for their innovative use of technology to improve business and society.

The GII awards, sponsored by Ziff-Davis (ZD), will be presented on December 14 at a gala event in San Francisco in conjunction with ZD Studios' Nextravaganza. This conference will feature Internet experts, visionaries, and celebrities exploring the developments, challenges, and opportunities of the Internet in the new millennium in an enlightening and entertaining environment. The unique format of an established and respected awards celebration combined with a thought-provoking conference offers senior executives a rare opportunity to network with industry luminaries, to learn, and to discuss the role of the Internet in their businesses' future.

SSC's "From A Distance" Web site (**http://education.ssc.nasa.gov/ltp**) was developed through NASA's Learning Technologies Project and features lesson plans created by classroom teachers about remote sensing, GPS, and GIS. The lesson plans make use of Internet resources and are tied to the National Education Standards framework.

"The GII awards honor people in all areas of society and industry who use the Internet to create extraordinary results, from making money to making a difference," said James Hake, founder of the GII awards and the Council for Internet Commerce. "The GII awards are the world's leading forum to define, recognize, and promote best practices and new models in the application of Internet and network technology."

The fourth annual GII awards recognize achievement in 10 categories central to the way people live, work, and play: Arts & Culture; Children; Commerce; Community; Education; Entertainment; Government; Health; Netpreneur; and News & Media.

The GII awards program is a non-partisan, private-sector initiative sponsored by leading corporations, organizations, publishers, and government agencies. The GII awards program is dedicated to helping people reach new levels of prosperity, community, and health in the Communications Age by learning from others whose efforts and accomplishments serve as models of excellence. Vice President Al Gore has described the awards as "...an innovation that is important to our future." The GII awards is currently the world's leading forum to define, recognize, and promote best practices and new models in the application of Internet and network technology.

Additional information about the GII awards category semifinalists is available at **http://www.gii.com**.

News from NASA

Space Center in Florida from March 9 - 11, 2000. The Lone Star games will be at the Astro Arena in Houston, TX, from March 16 - 18, 2000, and are sponsored by NASA's Johnson Space Center in Houston, TX. NASA's Langley Research Center in Hampton, VA, will sponsor the Langley/VCU regional games March 16 - 18, 2000, at Virginia Commonwealth University in Richmond, VA.

The deadline for application is November 30, 1999. NASA will accept all applications via the Internet at **http://robotics.nasa.gov/**.

Regional winners are eligible to compete in the national championship robotic games to be held April 6 - 8, 2000, at Walt Disney World's EPCOT Center in Orlando, FL. The national games require an additional registration fee.

FIRST was started in 1989 by inventor Dean Kamen to persuade American youth that engineering and technology are exciting fields. The annual robotics competition is patterned after Massachusetts Institute of Technology Professor Woodie Flowers' engineering design course.

Tom Dyson (650/604-6601) and Joseph Hering (650/604-2008), both of Ames, have additional information about the NASA-FIRST regional robotics games.

This bulletin will also be available in Adobe Acrobat format on the Developers' Workshop Web site at: **http://developers.ivv.nasa.gov/collab/pubs/bulletin/**

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